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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/733,990	12/10/2003	Kyoo Jin Han	2060-3-89	9407

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EXAMINER	
IQBAL, KHAWAR	

ART UNIT	PAPER NUMBER
2617	

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05/25/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/733,990

Applicant(s)

HAN ET AL.

Examiner

Khawar Iqbal

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 03 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 15 March 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1 and 5-30 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1 and 5-22 is/are allowed.
- 6) ☐ Claim(s) 23-30 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 23-30 are rejected under 35 U.S.C. 102(e) as being anticipated by Kim et al (20020141349).

Regarding claim 23 Kim et al teaches in a mobile communication system, a base station system having a function of setting reverse activity bit (RAB) to control a load amount in a reverse link, comprising (figs. 1-10):

a ROT measurement unit measuring ROT_m as a value of indicating a load degree of the reverse link; a ROT variation rate calculation unit calculating a variation rate of the ROT_m (ROT-V)(para. 0071-0073, 0123-129);

a first comparison unit comparing the ROT_m measured in the ROT measurement unit to a reference value previously set to a level lower than a maximum ROT a base station can receive (para. 0071-0073, 0123-0124);

a second comparison unit comparing an increment rate of the ROT-V calculated from the ROT variation rate calculation unit to a previously set upward reference value (para. 0071-0073, 0119-0129);

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and a third comparison unit comparing a decrement rate of the ROT-V calculated from the ROT variation rate calculation unit to a previously set downward reference value (para. 0045-0047, 0071-0073, 0119-0129).

Regarding claim 24 Kim et al teaches a RAB generation unit generating RAB to lower transmission data rate to terminals in a cell or sector when the ROT_m exceeds the reference value (ROT_{m_th}), the RAB generation unit generating the RAB to lower data rate for a predetermined slot length when the ROT_m fails to exceed the reference value and the increment rate of the variation rate of the ROT calculated from the ROT variation rate calculation unit exceeds the ROT_{Up}, the RAB generation unit generating the RAB to raise the data rate when the ROT_m fails to exceed the reference value and the increment rate of ROT-V calculated from the ROT variation rate calculation unit fails to exceed the ROT_{Up} (para. 0071-0073, 0119-0129, see claim 23).

Regarding claim 25 Kim et al teaches wherein the RAB lowers the data rate, which is generated when the ROT_m exceeds the reference value (ROT_{m_th}), is maintained each slot until the ROT_m goes below the reference value (ROT_{m_th}) (para. 0071-0073, 0119-0129).

Regarding claim 26 Kim et al teaches wherein when the measured ROT fails to exceed the reference value (ROT_{m_th}) and the decrement rate of the variation rate of the ROT downwardly exceeds a previously set downward reference value (ROT_{Down}), the RAB is generated to raise the data rate prior to a currently set RAB (para. 0071-0073, 0119-0129).

Regarding claim 27 Kim et al teaches wherein the predetermined slot length is set shorter as the ROTm gets lower (para. 0071-0073, 0119-0129).

Regarding claim 28 Kim et al teaches wherein the predetermined slot length is set longer as the ROTm gets closer to the reference value (ROTm_th) (para. 0071-0073, 0119-0129).

Regarding claim 29 Kim et al teaches wherein the predetermined slot length is calculated based on following equation: $\text{slot length} = a / \text{ROT}(\text{ROTm_th}[\text{dB}] - \text{ROT_Measured}[\text{dB}])$, where Slot_Length is the predetermined slot length, the ROT_measured is a measured ROT value (ROTm), and 'a' is a proportional constant related to slot length (para. 0071-0073, 0119-0129).

Regarding claim 30 Kim et al teaches wherein the mobile communication system is a 1xEV-DO system (para. # 0065).

Response to Arguments

3. Applicant's arguments filed 03-15-07 have been fully considered but they are not persuasive. Examiner has thoroughly reviewed applicant's arguments but firmly believes the cited reference to reasonably and properly meets the claimed limitations. Applicant's argument was regarding claim 23 that "a ROT variation rate (ROT-V)". In response, examiner would like to point out that Kim teaches the comparator 33 compares the detected level of signal interference with a threshold value in order to estimate the load on the reverse link. The determinator 34 determines a transmission data rate adjust information (e.g., increase, decrease or maintain, i.e. a ROT variation rate) based on the reverse link load determined by the comparator 33.

The base station then uses the detected ROT value to update the BS_RCV. If the detected ROT value is below ROT_TH1, BS_RCV increases by 1, and if the ROT value is below ROT_TH2, BS_RCV decreases by -1. However, if the ROT is maintained within a range between ROT_TH1 and ROT_TH2, the BS_RCV value is maintained at its previous value (para. 0045-0047, 0071-0073, 0119-0129).

Allowable Subject Matter

4. Claims 1,5-22 are allowed, in view of Applicant's amendments and arguments filed 09-18-06.

Conclusion

5. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Khawar Iqbal whose telephone number is 571-272-7909.


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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, GEORGE ENG can be reached on (571) 272-7495. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist/customer service whose telephone number is (571) 272-2600.

Khawar Iqbal


GEORGE ENG
SUPERVISORY PATENT EXAMINER